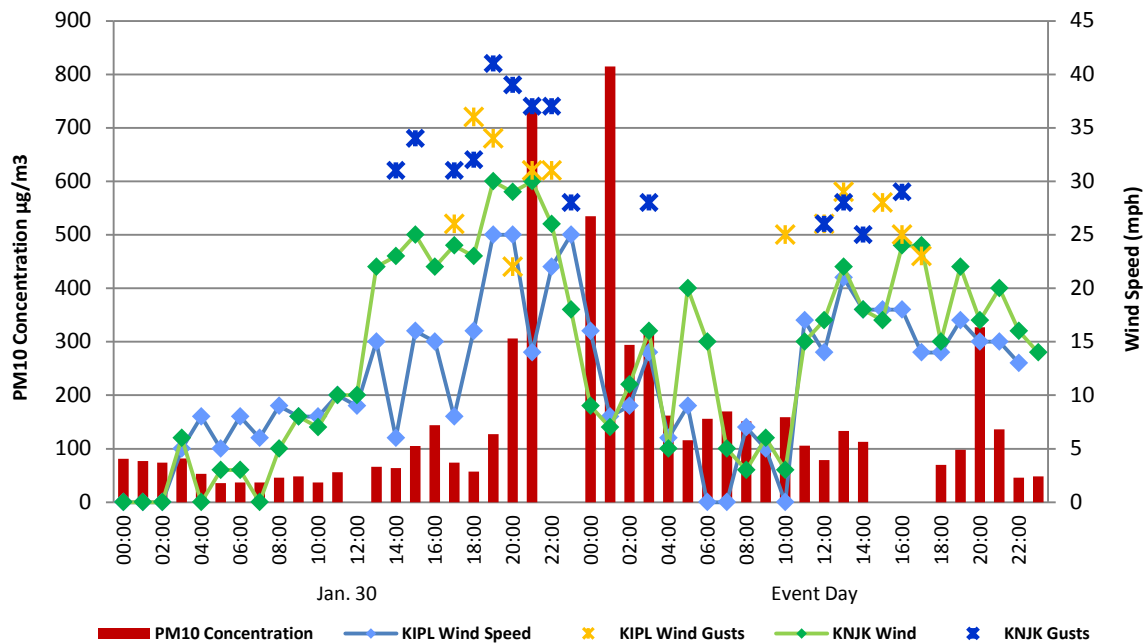


### APPENDIX C CORRELATED PM<sub>10</sub> CONCENTRATIONS AND WINDS

The following graphs illustrate the direct correlation between wind speeds<sup>1</sup> and PM<sub>10</sub> concentrations at select monitoring sites within the Salton Sea Air Basin. See **Figure 2-5** for location of sites.

#### IMPERIAL COUNTY SELECT SITES (Figures C-1 to C-3)

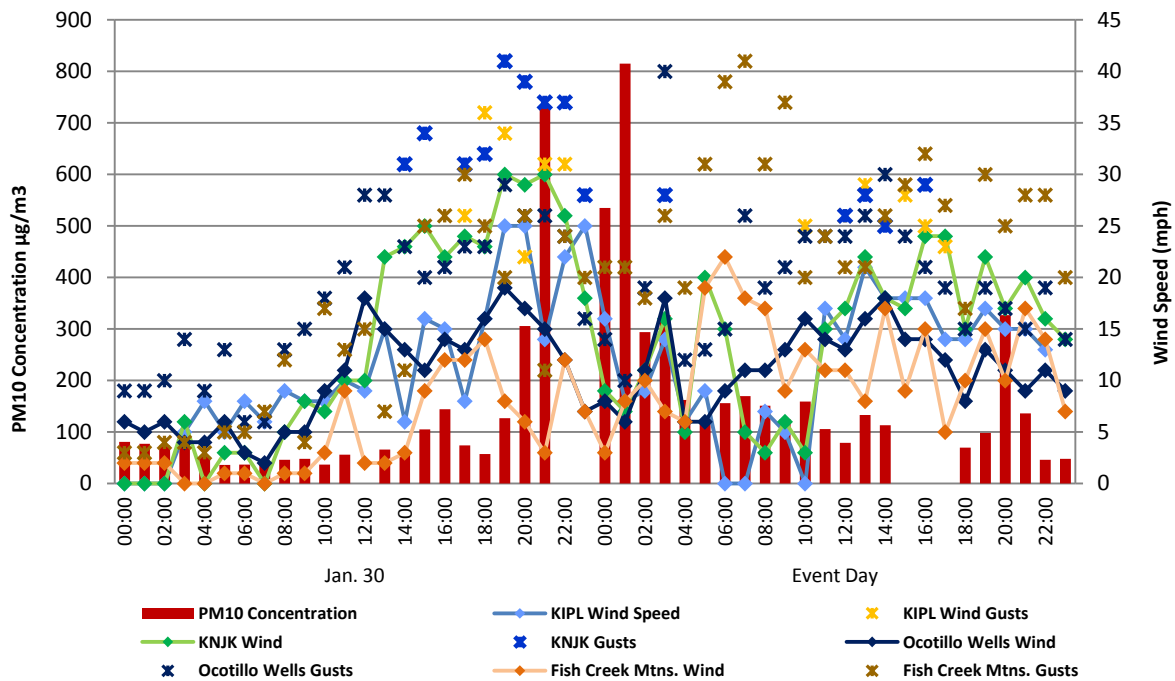
**FIGURE C-1  
BRAWLEY 48-HOUR PM<sub>10</sub> & WIND SPEED CORRELATION**



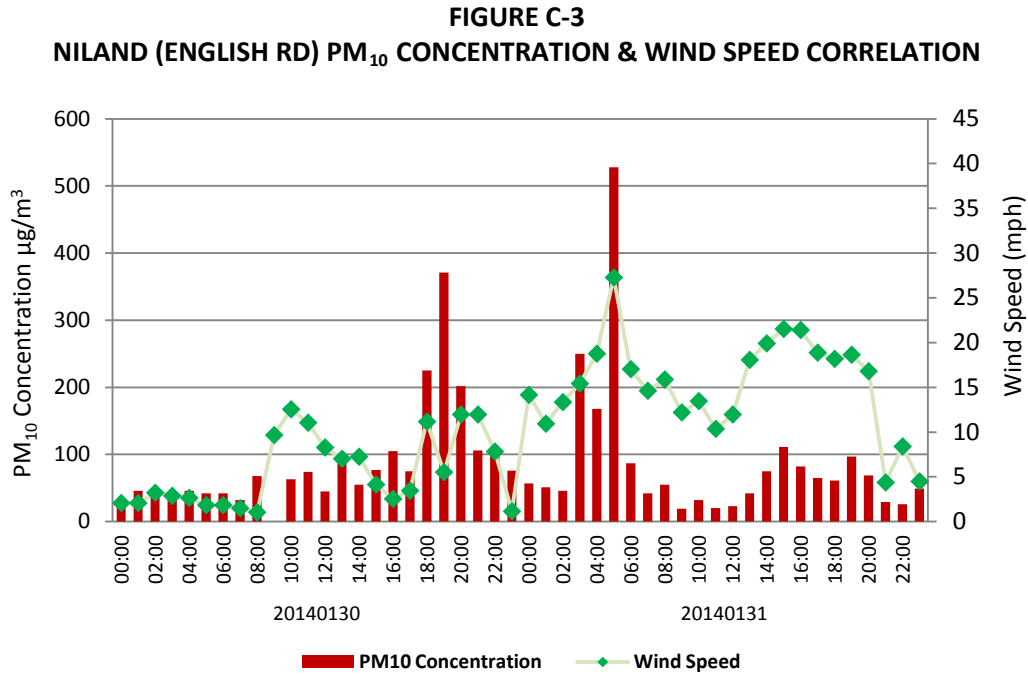
**Figs C-1:** Brawley Monitoring site recorded increased levels of PM<sub>10</sub> as winds speeds increased starting the afternoon of January 30. High wind speeds and gusts in the final hours of January 30 left dust suspended in the air on January 31, which saw more high winds and gusts later in the day. Air quality data from EPA's AQS data bank. Wind data from the NCEI QCLCD data bank.

<sup>1</sup> National Weather Service; NOAA's Glossary – Wind Speed: The rate at which air is moving horizontally past a given point. It may be a 2-minute average speed (reported as wind speed) or an instantaneous speed (reported as a peak wind speed, wind gust, or squall)[ <http://w1.weather.gov/glossary/index.php?letter=w>]

**FIGURE C-2**  
**BRAWLEY PM<sub>10</sub> CONCENTRATION & UPSTREAM WIND SITES**

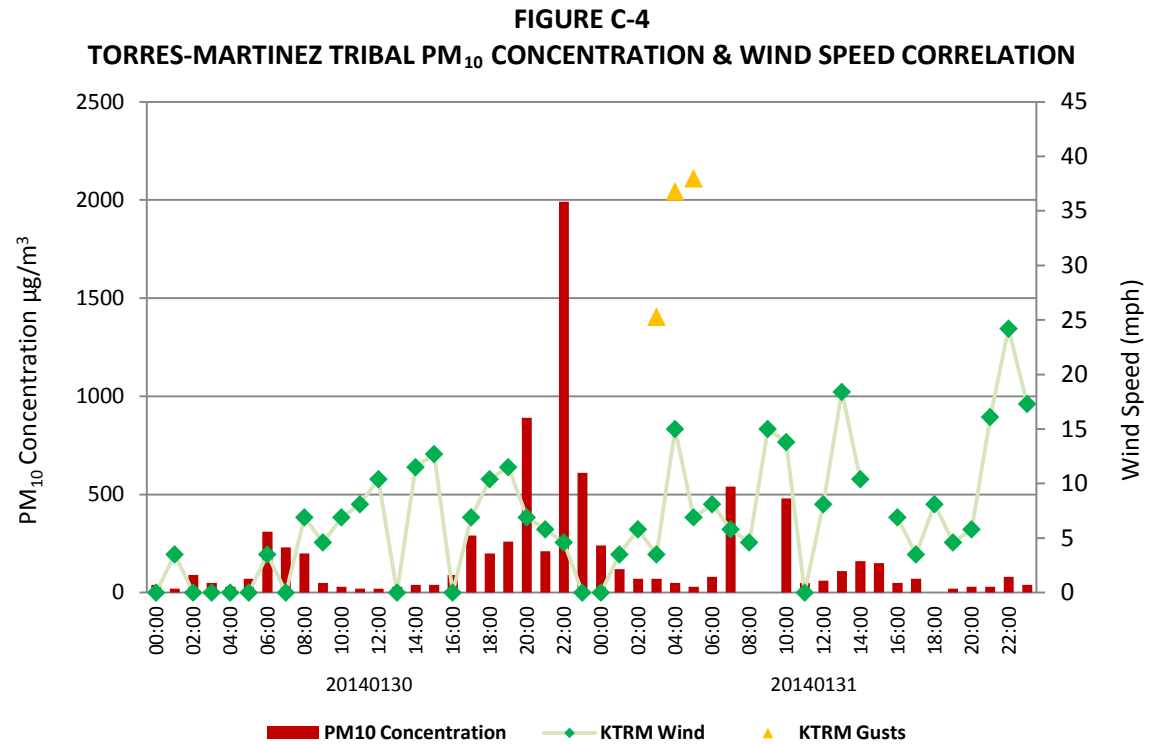


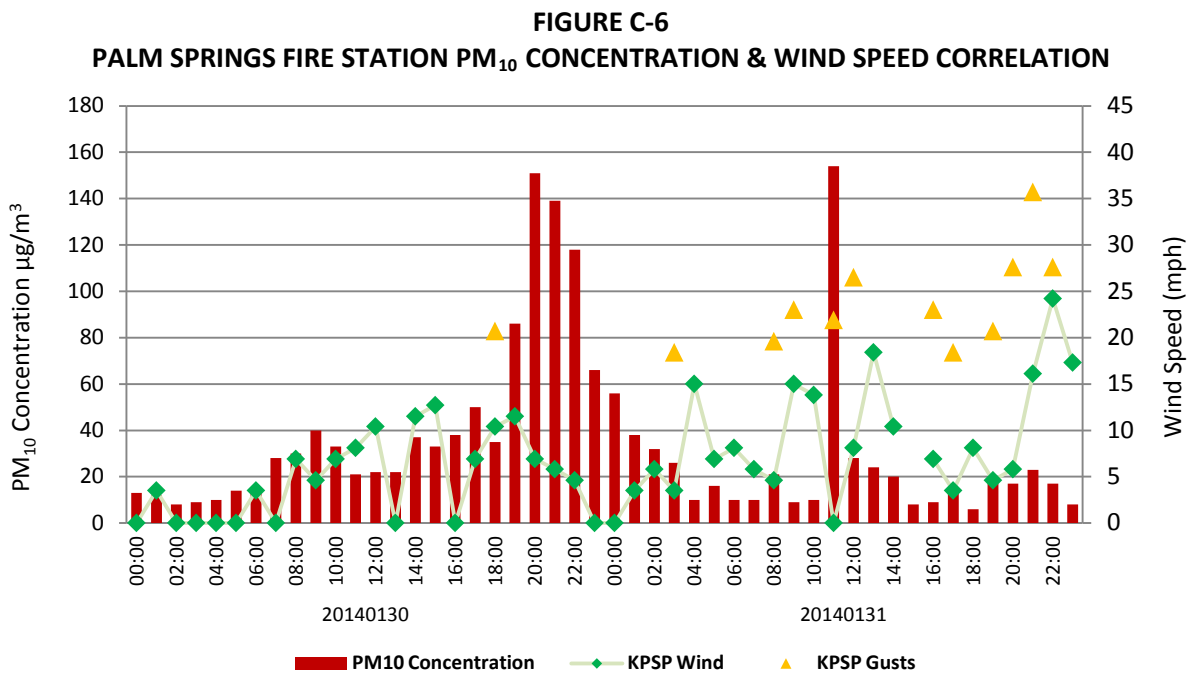
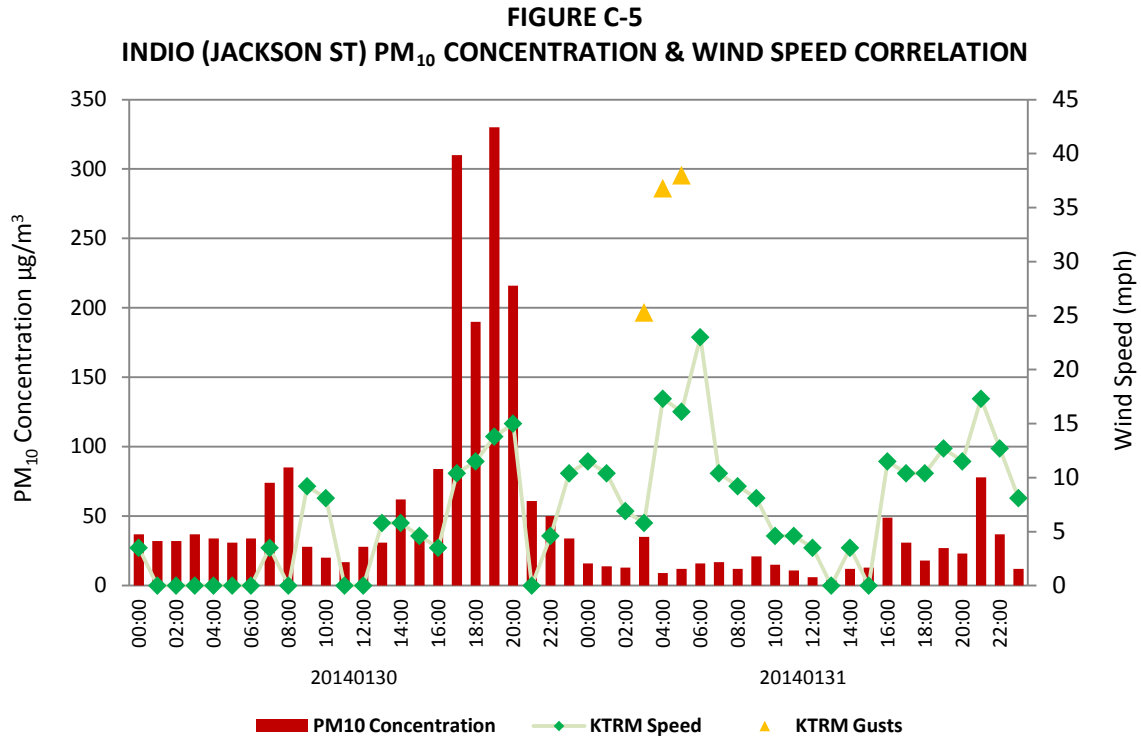
**Fig C-2:** The Brawley FEM monitor saw elevated levels of PM<sub>10</sub> in response to elevated wind speeds at upstream wind sites. Air quality data from EPA's AQS data bank. Wind data from the NCEI QCLCD data bank and the University of Utah's MesoWest data bank.



**Fig C-3:** The Niland (English Rd) monitor also saw PM<sub>10</sub> levels rise in response to increased wind speeds, but did not exceed. Air quality data and wind speed from the EPA's AQS data bank.

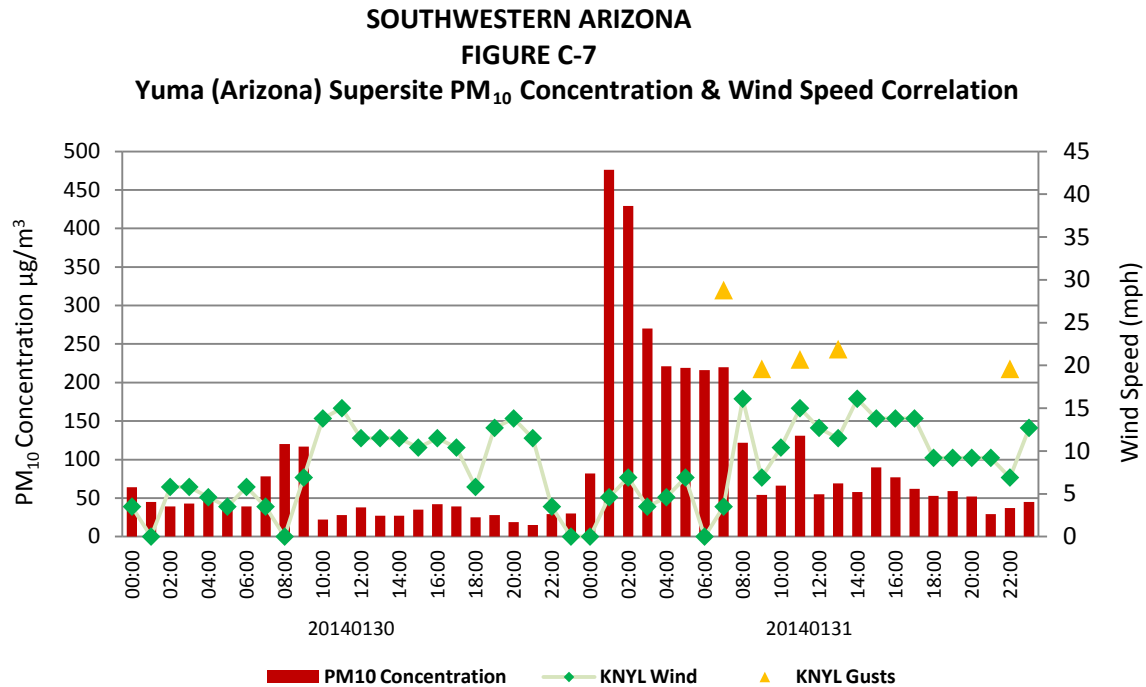
**RIVERSIDE COUNTY SELECT SITES  
(Figures C-4 to C-6)**





**Figs C-4 through C-6:** Monitoring sites in eastern Riverside County experienced increases in PM<sub>10</sub> concentrations on January 30 and January 31 following moderate increases in wind speed. The Palm Springs site utilized Palm Springs Airport (KPSP) wind data. Torres-Martinez Tribal and Indio (Jackson St) utilized Jacqueline Cochran Airport

wind data. Air quality data from the EPA's AQS data bank. Wind data from the NCEI QCLCD data bank.



**Figs C-7:** The monitoring site in Yuma, Arizona, is located in southwestern Arizona. Air quality data from the EPA's AQS data bank. Wind data from the NCEI QCLCD data bank.